

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior revisions, and listings, of claims in the application.

Listing of Claims:

1. (*Currently amended*) An on-line advertising system[[,]] comprising:

a processor;

one or more memories to communicate with the processor, the one or more memories storing database;

an advertisement database for maintaining advertisement data of a plurality of advertisements for contextual ads, at least one keyword for ~~related to~~ each said advertisement and a category selected by each advertiser of said advertisement ~~corresponding to each said advertisement~~ wherein said advertisement data for contextual ads are received from said each advertiser;

a content database for maintaining a content identifier associated with an on-line content and a predetermined content category associated with said on-line content, where said content identifier identifying the on-line content provided to a user terminal through a communication network;

a keyword database for maintaining a keyword, a similar keyword related thereto and an expansion keyword related to the keyword, wherein the similar keyword being a keyword having a similar meaning to the meaning of said keyword and the expansion keyword representing an upper concept or a lower concept of the keyword;

an advertisement data searching unit configured for searching the advertisement database for advertisement data of a category having a match with ~~corresponding to~~ the maintained content category associated with the on-line content to be displayed to a user;

an advertisement data selecting unit configured for selecting a portion of advertisement data among the searched advertisement data, based on a predetermined criterion, by using at least one keyword related to the searched advertisement data; and

a display control unit configured for controlling an advertisement associated with the selected advertisement data to be displayed on the user terminal in association with the searched on-line content,

wherein the advertisement data selecting unit comprises:

a keyword searching module configured for searching the on-line content to be displayed to the user for a keyword associated with the searched advertisement data, a similar keyword and an expansion keyword of said keyword by referring to the keyword database ~~the at least one keyword related to the searched advertisement data;~~

an exposure point computing module configured for ~~inspecting at least one selected from a group consisting of a number of the searched keywords in the on-line content, positions of the searched keywords on the on-line content and a font style of the searched keywords,~~ the exposure point computing module computing an exposure point for the searched search advertisement data based on a result of said inspection for the searched keywords, similar keywords and expansion keywords; and

an advertisement data selecting module configured for selecting a portion of advertisement data among the searched advertisement data based on the exposure point.

2-6. *(Cancelled)*

7. *(Previously presented)* The system as claimed in claim 1, wherein the advertisement data selecting module selects the predetermined number of advertisement data of which the exposure point ranks high.

8. *(Previously presented)* The system as claimed in claim 1, wherein the advertisement data selecting module selects predetermined advertisement data from the searched advertisement data on the basis of the exposure point and selects a predetermined number of random advertisement data, during a predetermined period, from the selected advertisement data.

9. *(Previously Presented)* The system as claimed in claim 8, wherein the advertisement data selecting module sequentially selects a predetermined number of the selected advertisement data during the predetermined period.

10. *(Previously Presented)* The system as claimed in claim 1, wherein the advertisement data selecting unit selects a predetermined number of random advertisement data from the searched advertisement data.

11. *(Previously Presented)* The system as claimed in claim 1, wherein the advertisement data selecting unit sequentially selects the predetermined number of advertisement data during a predetermined period from the searched advertisement data.

12. *(Currently amended)* A computer-implemented on-line advertising method, the method comprising the steps of:

receiving advertisement data for contextual ads from an advertiser, the advertisement data including at least one keyword and selection of a category for the contextual ads;

maintaining advertisement data of a plurality of advertisements for contextual ads, at least one keyword for related to each said advertisement and a category selected by each advertiser of said advertisement corresponding to each said advertisement, in an advertisement database;

determining a content category for an on-line content provided to a user terminal through a communication network via a content classifying system utilizing a predetermined classification algorithm;

maintaining a content identifier and said content category associated with said on-line content in a content database, the content identifier identifying said on-line content;

maintaining in a keyword database a keyword, a similar keyword related thereto and an expansion keyword related to the keyword, wherein the similar keyword being a keyword having a similar meaning to the meaning of said keyword and the expansion keyword representing an upper concept or a lower concept of the keyword;

storing at least one of said databases in a memory;

searching the advertisement database for advertisement data of a category having a match with corresponding to the content category associated with the on-line content to be displayed to a user;

selecting advertisement data among the searched advertisement data, based on a predetermined criterion, by using at least one keyword related to the searched advertisement data; and

controlling an advertisement associated with the selected advertisement data to be displayed on the user terminal in association with the content, where said steps of determining a

content category, searching the advertisement database, selecting advertisement data and controlling an advertisement is performed by a processor,

wherein the step of selecting advertisement data comprises the steps of:

searching the on-line content to be displayed to the user for a keyword associated with the searched advertisement data, a similar keyword and an expansion keyword of said keyword by referring to the keyword database ~~the at least one keyword related to the searched advertisement data;~~

~~inspecting at least one selected from a group consisting of a number of the searched keywords in the on-line content, positions of the searched keywords on the on-line content and a font style of the searched keywords;~~

computing an exposure point for the searched advertisement data based on ~~a result of said inspecting for~~ the searched keywords, similar keywords and expansion keywords;
and

selecting advertisement data from the searched advertisement data based on the exposure point.

13. *(Canceled)*

14. *(Currently amended)* The method as claimed in claim 12 ~~[[13]]~~, wherein the step of receiving selection of a category from the advertiser comprises the steps of:

maintaining categories in a predetermined database;

providing the categories for the advertiser by a directory searching method; and

receiving selection of a predetermined category among the provided categories, from the advertiser.

15-18. *(Canceled)*

19. *(Currently amended)* A computer-executable program product tangibly embodied on a computer storage medium that, when executed by one or more processors, causes the one or more processors to perform acts including:

receiving advertisement data for contextual ads from an advertiser, the advertisement data

including at least one keyword and selection of a category for the contextual ads;

maintaining advertisement data of a plurality of advertisements for contextual ads, at least one keyword for related to each said advertisement and a category selected by each advertiser of said advertisement ~~corresponding to each said advertisement~~, in an advertisement database;

determining a content category for an on-line content provided to a user terminal through a communication network via a content classifying system utilizing a predetermined classification algorithm;

maintaining a content identifier and said content category associated with said on-line content in a content database, the content identifier identifying said on-line content;

maintaining in a keyword database a keyword, a similar keyword related thereto and an expansion keyword related to the keyword, wherein the similar keyword being a keyword having a similar meaning to the meaning of said keyword and the expansion keyword representing an upper concept or a lower concept of the keyword;

searching the advertisement database for advertisement data of a category having a match with corresponding to the content category associated with the on-line content to be displayed to a user;

selecting advertisement data among the searched advertisement data, based on a predetermined criterion, by using at least one keyword related to the searched advertisement data; and

controlling an advertisement associated with the selected advertisement data to be displayed on the user terminal in association with the content,

wherein the act of selecting advertisement data comprises the acts of:

searching the on-line content to be displayed to the user for a keyword associated with the searched advertisement data, a similar keyword and an expansion keyword of said keyword by referring to the keyword database ~~the at least one keyword related to the searched advertisement data;~~

~~inspecting at least one selected from a group consisting of a number of the searched keywords in the on-line content, positions of the searched keywords on the on-line content and a font style of the searched keywords;~~

computing an exposure point for the searched advertisement data based on a result

~~of said inspecting for the searched keywords, similar keywords and expansion keywords;~~
and

selecting advertisement data from the searched advertisement data based on the exposure point.

20. (New) The computer-executable program product tangibly embodied on a computer storage medium as claimed in claim 19, wherein selecting advertisement data comprises:

computing a first exposure point for the searched advertisement data by assigning scores to a number of appearance of said searched keyword in the on-line content and positions of said searched keyword in the on-line content;

computing a second exposure point for the searched advertisement data by assigning scores to a number of appearance of said similar keyword in the on-line content and positions of said similar keyword in the on-line content;

computing a third exposure point for the searched advertisement data by assigning scores to a number of appearance of said expansion keyword in the on-line content and positions of said expansion keyword in the on-line content;

computing a total exposure point based on weighted scores of the first, second and third exposure points; and

selecting a portion of advertisement data among the searched advertisement data based on the total exposure point.

21. (New) The computer-executable program product tangibly embodied on a computer storage medium as claimed in claim 19, wherein selecting advertisement data comprises:

computing a first exposure point for the searched advertisement data by assigning a set of scores to a number of appearance of said searched keyword in the on-line content, positions of said searched keyword in the on-line content and a font style of said searched keywords wherein the font style is at least one selected from a group consisting of a font size and a font color;

computing a second exposure point for the searched advertisement data by assigning the set of scores to a number of appearance of said similar keyword in the on-line content, positions of said similar keyword in the on-line content and a font style of said similar keywords wherein the font style is at least one selected from a group consisting of a font size and a font color;

computing a third exposure point for the searched advertisement data by assigning the set of scores to a number of appearance of said expansion keyword in the on-line content, positions of said expansion keyword in the on-line content and a font style of said expansion keywords wherein the font style is at least one selected from a group consisting of a font size and a font color;

computing a total exposure point based on weighted scores of the first, second and third exposure points; and

selecting advertisement data from the searched advertisement data based on the total exposure point.

22. *(New)* The system as claimed in claim 1, wherein the exposure point computing module computes a first exposure point for the searched advertisement data by assigning scores to a number of appearance of said searched keyword in the on-line content and positions of said searched keyword in the on-line content, computes a second exposure point for the searched advertisement data by assigning scores to a number of appearance of said similar keyword in the on-line content and positions of said similar keyword in the on-line content, computes a third exposure point for the searched advertisement data by assigning scores to a number of appearance of said expansion keyword in the on-line content and positions of said expansion keyword in the on-line content, and computes a total exposure point based on weighted scores of the first, second and third exposure points, and the advertisement data selecting module selects a portion of advertisement data among the searched advertisement data based on the total exposure point.

23. *(New)* The system as claimed in claim 1, wherein the exposure point computing module computes a first exposure point for the searched advertisement data by assigning a set of scores to a number of appearance of said searched keyword in the on-line content, positions of said searched keyword in the on-line content and a font style of said searched keywords wherein the font style is at least one selected from a group consisting of a font size and a font color, computes a second exposure point for the searched advertisement data by assigning the set of scores to a number of appearance of said similar keyword in the on-line content, positions of said similar keyword in the on-line content and a font style of said similar keywords wherein the font style is

at least one selected from a group consisting of a font size and a font color, computes a third exposure point for the searched advertisement data by assigning the set of scores to a number of appearance of said expansion keyword in the on-line content, positions of said expansion keyword in the on-line content and a font style of said expansion keywords wherein the font style is at least one selected from a group consisting of a font size and a font color, and computes a total exposure point based on weighted scores of the first, second and third exposure points, and the advertisement data selecting module selects a portion of advertisement data among the searched advertisement data based on the total exposure point.

24. (New) The method as claimed in claim 12, wherein the step of selecting advertisement data comprises the steps of:

- computing a first exposure point for the searched advertisement data by assigning scores to a number of appearance of said searched keyword in the on-line content and positions of said searched keyword in the on-line content;

- computing a second exposure point for the searched advertisement data by assigning scores to a number of appearance of said similar keyword in the on-line content and positions of said similar keyword in the on-line content;

- computing a third exposure point for the searched advertisement data by assigning scores to a number of appearance of said expansion keyword in the on-line content and positions of said expansion keyword in the on-line content;

- computing a total exposure point based on weighted scores of the first, second and third exposure points; and

- selecting a portion of advertisement data among the searched advertisement data based on the total exposure point.

25. (New) The method as claimed in claim 12, wherein the step of selecting advertisement data comprises the steps of:

- computing a first exposure point for the searched advertisement data by assigning a set of scores to a number of appearance of said searched keyword in the on-line content, positions of said searched keyword in the on-line content and a font style of said searched keywords wherein the font style is at least one selected from a group consisting of a font size and a font color;

computing a second exposure point for the searched advertisement data by assigning the set of scores to a number of appearance of said similar keyword in the on-line content, positions of said similar keyword in the on-line content and a font style of said similar keywords wherein the font style is at least one selected from a group consisting of a font size and a font color;

computing a third exposure point for the searched advertisement data by assigning the set of scores to a number of appearance of said expansion keyword in the on-line content, positions of said expansion keyword in the on-line content and a font style of said expansion keywords wherein the font style is at least one selected from a group consisting of a font size and a font color;

computing a total exposure point based on weighted scores of the first, second and third exposure points; and

selecting advertisement data from the searched advertisement data based on the total exposure point.